

LTR-RSS

REMOTE SCHEDULE SELECTOR and BELL RINGER

Installation & User's Guide

THIS EQUIPMENT COMPLIES WITH FCC CLASS-B REQUIREMENTS PURSUANT SUBPART J OF PART-15

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING: Changes or modifications to this product not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numerique de la classe B est conforme a la norme NMB-003 du Canada.

OPERATION, INSTALLATION AND MAINTENANCE MANUAL

"REMOTE SCHEDULE SELECTOR" and "BELL RINGER" LATHEM TIME CORP

Doc #USG0026B

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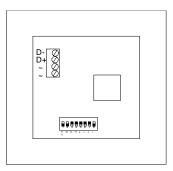
Welcome to the LTR-RSS (Remote Schedule Selector/Bell Ringer)

The "Remote Schedule Selector/Bell Ringer" for the LTR8-512 Master allows you to immediately activate any one (1) of the eight (8) possible schedules stored in the Master or deactivate all schedules. Your selection remains in effect until you make another schedule change (at the LTR-RSS, the MasterLink Software or the Master itself) or when a programmed schedule change occurs.

The Remote Schedule Selector/Bell Ringer contains an electronic circuit attached to the back of a cover plate for a double-gang switch-type electrical box (not supplied). This circuit consists of a low-power microprocessor, a 4-screw terminal block and dip switches to select your Master's 'address' and baud rate. Two of the screws on the terminal

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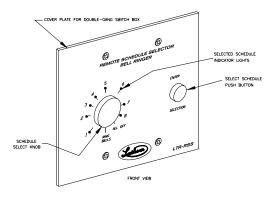
block connect a twisted-pair (typically Cat-3) low-voltage cable to the Master's RS-485 port, while the other two screws connect continuous 9-24V AC/DC power to the unit.



Circuit Board

On the face of the cover plate, you will see a 10-position knob (to select which schedule you want active), a button to send your changes to the Master, and status lights which confirm that your changes occurred.

MASTER CONTROL REMOTE BELL RINGER



Specifications

Power Input: 9-24V AC/DC, 1W max. For cable between the LTR-RSS and LTR8-512 less than 100 ft, power can be drawn from the 12V output on the LTR8-512's I/O connector. For longer cable, power should be drawn from a bell transformer or Lathem 24V power supply (typically a PS8-24). Low voltage wire is recommended

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Communications:	EIA / IEEE RS-485 half-duplex requiring
	single twisted-pair (UTP or STP)
	communications cable (typically CAT-3
	or CAT-5). Max length 4000 ft. Can be
	included on LTR8-512's RS-485 Host
	Communications Bus, along with other
	Lathem RS-485 devices
Terminal Block:	4-screw removable terminal plug supports
	both power (2-wire) and communications
	(2-wire) connections. Requires 3/32" flat-
	head screwdriver

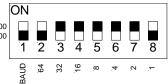
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Mechanical:	Circuit board is mounted to an industry- standard double-gang switch plate. Plate is screwed into standard double-gang flush-mount electrical box (typically Wire-Mold Part # V5747-2, not included). Connection of cables between electrical box and LTR8-512 or power source should be through conduit or other means approved by electrical / fire codes for low-voltage wire
Environmental:	Operation 0°-85°C (32°-185°F); 20- 60% R.H., non-condensing

Installing the LTR-RSS

To install the Remote Schedule Selector/Bell Ringer,

- Remove the LTR-RSS from its package and locate the dip switches (bottom center) on the back of the circuit board.
- Set the dip switches to match the Master's address (default = 65) and baud rate. (Press "*" at the Master to see its current address and baud rate).



The legend on the circuit board will help you know which way to slide the dip switches. Use switch 1 to set the Baud Rate. Slide it down to choose 9600 baud (default) and up to select 2400 baud.

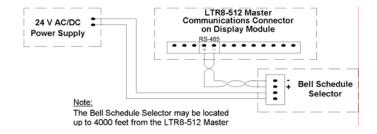
To select the address, use the numbers that add up to equal the number of your Master's address, then slide those switches down. For example, the default address is 065: switch 2 (value of 64) and switch 8 (value of 1) are down (64+1 = 65). For address 003, slide down switches 7 and 8 (2+1=3). For address 102, slide down switches 2, 3, 6 and 7 (64+32+4+2=102).

• Locate the terminal block on the back of the circuit board (upper left). Attach the communication cable wire-pair (with proper polarity) to the top two screws on the terminal block. The top screw is Data - and the next one down is Data + .

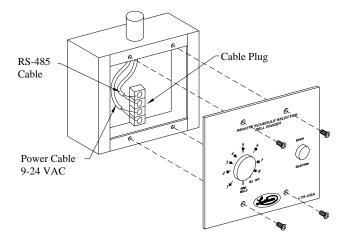


- Connect low-voltage power to the lower 2 screws on the terminal block. The LTR-RSS requires a voltage source of 9 to 24 volts, AC or DC. If the distance between the LTR8-512 Master and the LTR-RSS is less than 100ft, you can use a 2nd twisted-pair in the cable to bring power from the Master Terminals # 12 and 13 (on the rear of the Master's Display Panel, providing 12vAC at 250mA). You should use a separate low-voltage power supply or transformer if the cable would be longer than 100 feet or placed in areas of electrical interference that can cause problems for the Master. You should also place an in-line 250ma fuse on this connection.
- Secure the cover-plate to the electrical box with four 6-32 FH screws.

Wiring Diagram



Install Diagram



Using the LTR-RSS

When you make a schedule change, this change remains in effect until you make another change or when a programmed schedule change occurs. You can make schedule changes at the LTR-RSS, the MasterLink software or the Master itself.

To deactivate all schedules:

- Turn the knob to the ALL OFF position.
- Push the ENTER SELECTION button. All LED's will flash briefly and all schedules are deactivated.

To activate a schedule:

- Turn the knob to choose which schedule you want to activate.
- After turning the knob, push the ENTER SELECTION button.
- The indicator (LED) will light to show which schedule is now active. The LED stays lit for five (5) seconds then turns off to conserve power.
- All schedules other than the one you chose are now deactivated.

To manually ring all bells:

- Turn the knob to the RING BELLS position.
- Push the ENTER SELECTION button. All bell circuits will become active and will remain active for as long as you press the ENTER SELECTION button. Note: The bell circuits could remain active up to 2 seconds after releasing the ENTER SELECTION button.

Limited One-Year Limited Warranty

Lathem warrants the hardware products described in this guide against defects in material and workmanship for a period of **one year** from date of original purchase from Lathem or from an authorized Lathem reseller. The conditions of this warranty and the extent of the responsibility of Lathem Time Corporation ("Lathem") under this warranty are listed below.

- 1. This warranty will become void when service performed by anyone other than an approved Lathern warranty service dealer results in damage to the product.
- 2. This warranty does not apply to any product which has been subject to abuse, neglect, or accident, or which has had the serial number altered or removed, or which has been connected, installed, adjusted, or repaired other than in accordance with instructions furnished by Lathem.
- 3. This warranty does not cover dealer labor cost for removing and reinstalling the machine for repair, or any expendable parts that are readily replaced due to normal use.
- 4. The sole responsibility of Lathem under this warranty shall be limited to repair of this product, or replacement thereof, at the sole discretion of Lathem.
- 5. If it becomes necessary to send the product or any defective part to Lathem or any authorized service dealer, the product must be shipped in

its original carton or equivalent, fully insured with shipping charges prepaid. Lathem will not assume any responsibility for any loss or damage incurred in shipping.

- 6. WARRANTY DISCLAIMER AND LIMITATION OF LIABILITY: Except only the limited express warranty set forth above, the products are sold with no expressed or implied warranties of any kind, and the implied warranties of merchantability and fitness for a particular purpose are hereby expressly disclaimed. No warranties are given with respect to products purchased other than from Lathem or an authorized Lathem reseller and any such products are purchased "as is, with all faults." In no event will Lathem be liable for any direct, indirect, special, incidental or consequential damages arising out of or in connection with the delivery, use or inability to use, or performance of this product. In the event any limited remedy given herein shall be deemed to have failed of its essential purpose, Lathem's maximum liability shall be to refund the purchase price upon return of the product.
- 7. Proof of date of purchase from Lathem or an authorized Lathem reseller is required for warranty service on this product.
- 8. This Warranty grants specific legal rights. Additional legal rights, which may vary by locale, may also apply.
- 9. Should any difficulties arise with the performance of this product during warranty, or with any Lathem authorized service centers, contact Lathem Time at the address below.

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